

## **REMARKS**

This Amendment is filed in response to the Office Action dated August 25, 2005. Claims 3-5, 8-9 and 46, 49-54 are pending in the Application. Amendments to claims 46 and 49 have been presented herein. Claim 61 has been added herein.

### **I. EXAMINER INTERVIEW**

On November 9, 2005, the undersigned and his associate, Harry Laxton, Jr. had an in-person interview with Examiner Mark T. Henderson and Primary Examiner Monica Carter regarding the Office Action issued August 25, 2005. The Applicants appreciate the courtesy and assistance extended by Examiners Henderson and Carter during this interview.

The primary purpose of the interview was to present examples of the self-authenticating documents according to the invention and to demonstrate the differences between the claimed invention and the prior art. In particular, the undersigned explained and demonstrated the significance of the line frequency of the encoded, hidden indicia and its correspondence to the frequency of the lenticular lens. This was specifically intended to address the statement on page 4 of the Office Action that "it would have been obvious . . . to use any type of imaged indicia, since it would only depend on the intended use of the assembly and the desired information to be displayed."

In the demonstration, the undersigned showed how the hidden indicia can be viewed only with a decoder having a frequency corresponding to the frequency of the lines making up the indicia. The undersigned explained that this differs significantly from the micro-array images of the Drinkwater Application. Although these images are repeated at a certain frequency, a decoder with that frequency is not necessary to view them. Any magnifier of sufficient power can be used to view the images, each of which is identical. (See Drinkwater Application page 8, line 37 to page 8a, line 1.)

Upon viewing the demonstration, the Examiner agreed that the examples demonstrated differences from the prior art of record. The Examiner indicated that claim 46 would be allowable over the prior art of record if it was amended to add that "at least a portion of the encoded, hidden indicia is decodable only through the use of a decoder having a decoding

frequency corresponding to the predetermined line frequency.” The Examiner also suggested that reciting that the lines of the encoded indicia are “continuous lines” (as opposed to lines used to form a small image such as in the Drinkwater Application) would also distinguish the claims from the prior art of record.

The Examiner also explained his contention that the wording “being formed from a plurality of lines printed with a line frequency” and as used in claim 49 recites a product-by-process element. The Examiner suggested that this be amended to “comprising a plurality of lines having a line frequency.”

## **II. THE CLAIMS ARE PATENTABLE OVER THE PRIOR ART**

### **A. Paragraph 3 Rejection of Claims 3-5, 8, 9 and 46**

Claims 3-5, 8, 9 and 46 stand rejected under 35 U.S.C. 103(a) as being assertedly unpatentable over Taylor et al, PCT Application No. WO 98/15418 (Taylor Application) in view of Drinkwater et al., PCT Application No. WO 94/27254 (Drinkwater Application). Claim 46 is an independent claim and claims 3-5, 8, and 9 are all dependent upon claim 46. The Applicants respectfully traverse this rejection.

#### **1. Independent Claim 46**

In the present Amendment herein (“Amendment”), claim 46 was amended in accordance with the Examiner’s suggestion as noted above. As amended, claim 46 recites a self authenticating article comprising a substrate having at least one printable surface portion having encoded, hidden indicia printed thereon. The encoded, hidden indicia comprises a plurality of lines printed with a predetermined line frequency. At least a portion of the encoded, hidden indicia is decodable only through the use of a decoder having a decoding frequency corresponding to the predetermined line frequency. The article further comprises a lenticular lens attached to the substrate. The lens is configured for optically decoding encoded, hidden indicia viewed therethrough and has a lens frequency corresponding to the line frequency of the encoded, hidden image. The lens is disposed so that the lens may be positioned to overlie the at least one printable surface portion so that encoded, hidden indicia printed on the at least one surface portion may be viewed through and decoded by the lens.

## 2. Claim 46 Is Patentable over the Combined Teachings of Taylor and Drinkwater

The combined teachings of the Taylor and Drinkwater Applications do not teach, disclose or suggest the features of claim 46. In particular, the combination does not disclose the use of encoded, hidden indicia comprising a plurality of lines printed with a predetermined line frequency, wherein at least a portion of the encoded, hidden indicia is decodable only through the use of a decoder having a decoding frequency corresponding to the predetermined line frequency.

The Taylor Application discloses self-verifying security documents, such as banknotes, that comprise a flexible sheet formed from a plastic substrate bearing indicia thereon. Taylor Application, Abstract and page 2, lines 22-29. The sheet has a window of transparent plastic material that includes self-verification means for verifying a security device positioned on a second portion of the sheet. *Id.* As noted in the Office Action, the Taylor Application does not disclose the use of a lens having a lens frequency corresponding to the predetermined line frequency of an encoded hidden image. (See Office Action, section 3, last paragraph.).

The Drinkwater Application is directed to a security device comprising an array of microimages which, when viewed through a corresponding array of substantially spherical microlenses, generates a magnified image. Drinkwater Application Abstract. The microimage array is a two dimensional array of identical microimages each having a dimension up to about 250 microns. Drinkwater Application, page 2, lines 1-8 and Figures 1A and 1B. The magnified image is produced when the microimage array is viewed through a corresponding array of microlenses having substantially the same pitch as the microimage array. *Id.*

The Applicants agree with the Examiner that the Taylor Application does not disclose the use of a lens having a lens frequency corresponding to the predetermined line frequency of an encoded hidden image. The Applicants further submit that the Taylor Application does not disclose that at least a portion of the encoded, hidden indicia can be decoded only through the use of a decoder with a corresponding line frequency.

As demonstrated in the Examiner Interview, the teachings of the Drinkwater Application do not cure the deficiencies of the Taylor Application with respect to claim 46. The Drinkwater Application does not disclose the use of encoded images. Instead, it discloses the use of an array

of micro-images, each of which is a miniature version of an image to be viewed through a micro-array lens. The micro-array lens is arranged so that it has array frequencies corresponding to those of the array of micro-images. This serves to produce a composite image. However, this image can also be discerned by simple magnification of any one of the micro-images. Because the image is not truly encoded, a potential viewer would not require a decoder with a corresponding frequency in order to view the image.

Accordingly, as agreed by the Examiner in the Examiner Interview, the features of claim 46 are not disclosed or suggested by the combined teachings of the Taylor and Drinkwater Applications. The Applicants therefore request that the rejection of claim 46 under 35 U.S.C. 103(a) be withdrawn.

3. Dependent claims 3-5 and 8-9

Claims 3-5 and 8-9 are dependent on claim 46, which has been shown to be patentable over the cited combination of references. The Applicants submit that by virtue of their dependency, claims 3-5 and 8-9 are also patentable and request that their rejection under 35 U.S.C. 103(a) be withdrawn.

B. Paragraph 3 Rejection of Claims 49-54

Claims 49-54 stand rejected under 35 U.S.C. 103(a) as being assertedly unpatentable over the Taylor and Drinkwater Applications. The Applicants respectfully traverse this rejection.

1. Independent claim 49 Is Patentable over the Cited References

Claim 49 has been amended in accordance with the Examiner's suggestions as noted in the Interview Summary herein. As amended, claim 49 recites a self authenticating article comprising a substrate having at least one printable surface portion; a lenticular lens having a predetermined lens frequency, the lenticular lens being configured for optically decoding encoded indicia viewed therethrough and being attached to the substrate so that the lens can be positioned to overlie the at least one printable surface portion to decode encoded indicia printed thereon; and encoded, hidden indicia printed on the at least one printable surface portion of the substrate, the encoded, hidden indicia comprising a plurality of lines having a line frequency that is a multiple of the lens frequency, at least a portion of the encoded, hidden indicia being

decodable only through the use of a decoder having a decoding frequency corresponding to the predetermined line frequency.

The Applicants submit that claim 49 is patentable over the cited references for the same reasons as submitted above with respect to claim 46. The Applicants therefore request that the rejection of claim 49 under 35 U.S.C. 203(a) be withdrawn.

2. Dependent claims 50-54

Claims 50-54 are dependent on claim 49, which has been shown to be patentable over the cited combination of references. The Applicants submit that by virtue of their dependency, claims 50-54 are also patentable and request that their rejection under 35 U.S.C. 103(a) be withdrawn.

3. The rejection under 35 103(a) should be withdrawn

For at least the above reasons, the Applicants respectfully request that the rejection under 35 U.S.C. 103(a) of claims 49 and dependent claims 50-54 be withdrawn.

### **III. NEW CLAIM**

Claim 61 is added by the present Amendment. The Applicants submit that claim 61 includes no new matter.

Claim 61 is intended to build on the Examiner's suggestion relating to continuous lines. This is accomplished through the recitation of indicia comprising raster lines. Support for claim 61 appears on page 11, lines 3-23 of the specification.

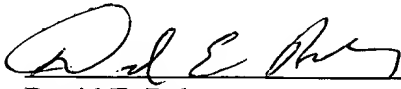
### **IV. CONCLUSION**

For at least the reasons set forth above, the Applicants respectfully submit that claims 3-5, 8-9, 46, 49-54 and 61 are in condition for allowance. The Applicants therefore request that the Application be allowed and passed to issue.

Should the Examiner believe anything further is desirable in order to place the Application in even better condition for allowance, the Examiner is invited to contact the Applicants' undersigned representative.

Date: November 23, 2005

Respectfully submitted,

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